
OHS41132

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MDL INFORMATION SYSTEMS, INC. 1281 Murfreesboro Road, Suite 300

Nashville, TN 37217-2423

1-615-366-2000

EMERGENCY TELEPHONE NUMBER: 1-800-424-9300 (NORTH AMERICA)

1-703-527-3887 (INTERNATIONAL)

SUBSTANCE: BUFFER SOLUTION (PH 4.00)

TRADE NAMES/SYNONYMS:

BUFFER SOLUTIONS SB-98; OHS41132

CREATION DATE: Apr 09 1991 REVISION DATE: Mar 18 2002

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: POTASSIUM HYDROGEN PHTHALATE

CAS NUMBER: 877-24-7

EC NUMBER (EINECS): 212-889-4

PERCENTAGE: 1.0

COMPONENT: FORMALDEHYDE SOLUTION

CAS NUMBER: 50-00-0

EC NUMBER (EINECS): 200-001-8

PERCENTAGE: 0.05

COMPONENT: METHYL ALCOHOL

CAS NUMBER: 67-56-1

EC NUMBER (EINECS): 200-659-6

PERCENTAGE: 0.02

COMPONENT: WATER

CAS NUMBER: 7732-18-5

EC NUMBER (EINECS): 231-791-2

PERCENTAGE: 98.0-99.0

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=0 REACTIVITY=0

EMERGENCY OVERVIEW:

COLOR: various colors, colorless

PHYSICAL FORM: liquid

MAJOR HEALTH HAZARDS: respiratory tract irritation, skin irritation, eye

irritation

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information on significant adverse effects

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: same as effects reported in short term exposure

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: same as effects reported in short term exposure

INGESTION:

SHORT TERM EXPOSURE: nausea, vomiting, diarrhea

LONG TERM EXPOSURE: no information on significant adverse effects

CARCINOGEN STATUS:

OSHA: No NTP: No IARC: No

SECTION 4 FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

INGESTION: Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire hazard.

EXTINGUISHING MEDIA: regular dry chemical, carbon dioxide, water, regular foam

Large fires: Use regular foam or flood with fine water spray.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

FLASH POINT: No data available.

SECTION 6 ACCIDENTAL RELEASE MEASURES

WATER RELEASE:

Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

OCCUPATIONAL RELEASE:

Stop leak if possible without personal risk. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

SECTION 7 HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

BUFFER SOLUTION (PH 4.00):

No occupational exposure limits established.

VENTILATION: Based on available information, additional ventilation is not

required. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any chemical cartridge respirator with organic vapor cartridge(s).

Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).

Any air-purifying respirator with a full facepiece and an organic vapor canister.

For Unknown Concentrations or Immediately Dangerous to Life or Health - Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: liquid

APPEARANCE: clear

COLOR: various colors, colorless

ODOR: Not available

BOILING POINT: 212 F (100 C)

FREEZING POINT: 32.0 F (0 C)

VAPOR PRESSURE: 14 mmHg @ 20 C (water)

VAPOR DENSITY (air=1): 0.7 (water)

SPECIFIC GRAVITY (water=1): 1.0

WATER SOLUBILITY: soluble

PH: 4.0

VOLATILITY: Not available

ODOR THRESHOLD: Not available

EVAPORATION RATE: >1 (ether=1)

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

INCOMPATIBILITIES: oxidizing materials

POTASSIUM HYDROGEN PHTHALATE:

OXIDIZERS (STRONG): Fire and explosion hazard.

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

POTASSIUM HYDROGEN PHTHALATE:

TOXICITY DATA:

3200 mg/kg oral-rat LDLo (Biopharm)

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

ACUTE TOXICITY LEVEL: Insufficient Data.

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: May cause irritation.

CHRONIC EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: Repeated or prolonged exposure may cause

irritation.

SKIN CONTACT:

ACUTE EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: May cause irritation.

CHRONIC EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: Repeated or prolonged contact may cause

dermatitis.

EYE CONTACT:

ACUTE EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: Direct contact may cause irritation,

redness, and pain.

CHRONIC EXPOSURE:

 ${\tt POTASSIUM\ HYDROGEN\ PHTHALATE:}\ {\tt Repeated\ or\ prolonged\ exposure\ may\ cause\ conjunctivitis.}$

INGESTION:

ACUTE EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: May cause nausea, vomiting, and diarrhea.

CHRONIC EXPOSURE:

POTASSIUM HYDROGEN PHTHALATE: No data available.

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION: No classification assigned.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: No classification assigned.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

Formaldehyde: 100 LBS RQ

METHYL ALCOHOL (METHANOL): 5000 LBS RQ

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):

Not regulated.

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SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40):
   Not regulated.
 SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):
   ACUTE: Yes
   CHRONIC: No
   FIRE: No
   REACTIVE: No
   SUDDEN RELEASE: No
 SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.
 OSHA PROCESS SAFETY (29CFR1910.119):
   Formaldehyde: 1000 LBS TQ
STATE REGULATIONS:
 California Proposition 65:
   Known to the state of California to cause the following:
     Formaldehyde
       Cancer (Jan 01, 1988)
CANADIAN REGULATIONS:
 WHMIS CLASSIFICATION: Not determined.
EUROPEAN REGULATIONS:
 EC CLASSIFICATION (CALCULATED): Not determined.
NATIONAL INVENTORY STATUS:
 U.S. INVENTORY (TSCA): Listed on inventory.
 TSCA 12(b) EXPORT NOTIFICATION: Not listed.
SECTION 16 OTHER INFORMATION
MSDS SUMMARY OF CHANGES
 SECTION 3 HAZARDS IDENTIFICATION
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